

What is claimed is:

1. A method for processing image data for display, the method comprising the steps of:

storing a pixel map in a memory;

5 storing a plurality of different headers associated with the pixel map in the memory; and

selecting a header defining a desired display characteristic for the pixel map.

10 2. The method of claim 1, further comprising the step of:

processing the selected header and associated pixel map to generate an image in a displayable format.

15 3. The method according to claim 1, wherein the pixel map is associated with an on-screen display (OSD) data structure.

20 4. The method of claim 1, wherein the desired display characteristic is at least one of a presence or absence of a side panel, a YUV or YIQ colorimetry, a degree of transparency, an image size, an interlaced or progressive display format, a color scheme, an aspect ratio, a blending ratio, a resolution factor, a number of bits per pixel, a compression factor, a horizontal pixel duplication value, and a vertical pixel duplication value.

25 5. A method of generating an image for display on a display unit, the method comprising the steps of:

receiving a request to display an image having a desired display characteristic;

30 accessing an image data structure stored in a memory in response to the received request, the image data structure including an image block containing image data and a plurality of associated header blocks, each header block containing the memory location of the image block and a unique image display characteristic;

selecting a header block having a unique display characteristic that corresponds to the desired display characteristic; and

processing the selected header block and the associated image block such that the image having the desired characteristic is displayed.

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6. The method of claim 5, wherein the image is an on-screen display.

7. The method of claim 5, wherein the display characteristic is at least one of a presence or absence of a side panel, a YUV or YIQ colorimetry, a degree of transparency, an image size, an interlaced or progressive display format, a color scheme, an aspect ratio, a blending ratio, a resolution factor, a number of bits per pixel, a compression factor, a horizontal pixel duplication value, and a vertical pixel duplication value.

8. The method of claim 5 wherein the display characteristic is a unique set of display characteristics.

9. The method of claim 5, further including the step of:  
storing the data structure in the memory prior to the receipt of the image display request.

10. The method of claim 5, wherein the image data structure is one of a plurality of image data structures stored in the memory.

11. The method of claim 5, wherein the image data in the image block of the image data structure is a pixel map.

12. In a system for the reception, processing, and display of video and graphical data, a method of generating an on-screen display:

storing a data structure in a memory upon an initialization of the system, the data structure including on-screen display content data and a plurality of headers associated with the on-screen display content data, each header

containing a distinct set of processing instructions for the processing of the on-screen display content data;

receiving a request to display an on-screen display corresponding to the stored data structure, the request indicating that the on-screen display is to be displayed in accordance with a selected format;

retrieving the on-screen display content data and a header of the plurality of headers from the memory in response to the received request, the retrieved header containing a distinct set of processing instructions that correspond to the selected format; and

processing the retrieved on-screen display content data in accordance with the distinct set of processing instructions of the retrieved header to generate the on-screen display in the selected format.

13. The method of claim 12, wherein the distinct set of processing instructions includes an instruction for at least one of a presence or absence of a side panel, a YUV or YIQ colorimetry, a degree of transparency, an image size, an interlaced or progressive display format, a color scheme, an aspect ratio, a blending ratio, a resolution factor, a number of bits per pixel, a compression factor, a horizontal pixel duplication value, and a vertical pixel duplication value.

14. The method of claim 12, wherein the on-screen display content data is a pixel map.

15. A system for generating an image, the system comprising:  
an input coupled to a source of image requests, each image request containing a desired image and desired image characteristic;

a memory for storing a plurality of image data structures, each image data structure including an image segment and a plurality of associated header segments, each header segment including a unique image characteristic;

a controller coupled to the input and the memory, the controller accessing an image data structure of the plurality of image data structures in response to an image request received from the input, the controller accessing the image

data structure such that the image segment corresponding to the desired image and the associated header segment corresponding to the desired image characteristic are retrieved from the memory; and

processing circuitry coupled to the controller for receiving the retrieved  
5 image segment and header segment from the controller and processing the image segment in accordance with the header segment to generate an image corresponding to the image request.

16. The system of claim 15, further comprising:

10 a display unit coupled to the processing circuitry for displaying the image generated by the processing circuitry.

17. The system of claim 15, wherein the image segment is a pixel map.

15 18. The system of claim 15, wherein the unique image characteristic is at least one of a presence or absence of a side panel, a YUV or YIQ colorimetry, a degree of transparency, an image size, an interlaced or progressive display format, a color scheme, an aspect ratio, a blending ratio, a resolution factor, a number of bits per pixel, a compression factor, a horizontal pixel duplication  
20 value, and a vertical pixel duplication value.

19. The system of claim 15, wherein the image corresponding to the image request is an on-screen display.

25 20. The system of claim 15, wherein the unique image characteristic is a unique set of image characteristics.

21. An on-screen display memory comprising:

a first region containing a pixel map;

30 a second region containing a plurality of different headers respectively defining different display characteristics for the pixel map; and

a control port for selecting a desired one of the different headers.

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